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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/808,956	0/808,956 03/25/2004		James Edward Gordon Armour	18872.0152	6365
26712	7590	09/26/2005		EXAMINER	
HODGSON		LLP	PATEL, VISHAL A		
ONE M & T PLAZA SUITE 2000				ART UNIT PAPER NUMBE	
BUFFALO,		03-2391	3673		

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/808,956	ARMOUR ET AL.					
Office Action Summary	Examiner	Art Unit					
	Vishal Patel	3673					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONED	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 13 Ju	ılv 2005.						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		1					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.							
4) Of the above claim(s) <u>4.5 and 14-18</u> is/are withdrawn from consideration.							
4a) Of the above claim(s) <u>4,5 and 14-16</u> is/are withdrawn from consideration.  5) Claim(s) is/are allowed.							
<u> </u>							
7) Claim(s) is/are objected to.							
· <u> </u>	<u></u>						
	· cicouon requirement.	•					
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/7/05.	4) ☐ Interview Summary ( Paper No(s)/Mail Da	(PTO-413)					

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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#### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election with traverse of species I: figures 1-3 in the reply filed on 7/13/05 is acknowledged. The traversal is on the ground(s) that the principle of the invention in figures 5-6 are similar is not persuasive because the principle of the invention are not identical. Furthermore the as seen in figures 5-6, additional part(s) are needed for using this seal in a multiple sealing unit seal.

Claims 14-15, which claim a sealing assembly is withdrawn. How can the sealing lip of claim 1 have a movable parts as claimed in 14-15?

Claims 4-5 and 16-18 are withdrawn as drawn to a non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, lines 1-3, "the sealing means" and "the annular member", theses limitations lack antecedent basis.

Claim 10, line 4, "the sealing means", these limitations lacks antecedent basis.

Claim 13, "the injection means", this limitation lacks antecedent basis.

Claim 12, "the at least one port", this limitation lacks antecedent basis.

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Claim 11, "the inject fluid is injected", how can a sealing lip have an injected fluid?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3, 7-12 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopper (US. 4,337,956).

Hopper discloses a lip seal having a sealing lip having an end that is adapted to contact a relatively movable surface, a shield coextensive with the sealing lip on an unsealed side thereof to protect the sealing lip from the unsealed region and to define a space with the lip, means permitting the injection under pressure of fluid into the space and the shield having an end disposed such that the fluid exits the space by passing between the lip end and the shield end into the unsealed region (see figure 3, a lip 24 having an end 68 contacting 14, a shield lip 22 having end 66, fluid flows between the ends and past into the unsealed region).

As to claim 2: The claim is considered to be intended use because this only applies during normal use.

As to claim 3: The sealing means (a sealing means having sealing lip 24 and the shield 22) comprises a first resilient member having the sealing lip and adjacent to the first resilient member, a second resilient member having the shield.

As to claim 7-12: The first and second members are annular. The sealing means comprises an outer diameter body portion from which the lip and shield extend radially inwardly

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(body 20). The body portion (20) is adapted for retention within a housing of a bore for a shaft (intended use). The means permitting injection (port 78) is arranged to admit fluid between the shield and a groove portion (groove portion 76 adjacent the lip 24) of the sealing means, which defines in part the sealing lip. The sealing means comprising at least one port (78) extending through the sealing means and through which the inject fluid is injected. The means permitting injection is arranged to admit fluid between the shield and a groove portion of the sealing means which defines in part the sealing lip and the at least one port extends between the first and second annular members (port 78 extends between the first and second annular members).

As to claims 19-20: Theses claims are inherently rejected in view of the above limitations.

6. Claims 1 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 2643769 (referred as DE '769).

DE '769 discloses a lip seal having a sealing lip and a shield lip (6 is the sealing lip and 7 is the shield). The lip seal having a means (bore 3) permitting injection of fluid. The shield coextensive with the sealing lip. The sealing and shield lips being normally closed together (the lips are together as seen in figure 1) and permits injection of fluid between the closed lips at sufficient pressure to cause the lips to open during use to allow the fluid to flow towards the end of the sealing lip (method limitation not given patentable weight in an apparatus claim).

# Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopper.

Hopper discloses the claimed invention except for the lip seal to be made of reinforced elastomer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the lip seal to be made of reinforced elastomer, since it has been held to be within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Further evidence is give by the reference of Schottdorf to use a reinforced elastomer to form a lip seal.

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eichenberger teaches a seal similar to applicants, Dodge, Jay, Caillault et al, Szcupak, Pietsch and Schmitt.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

September 20, 2005

Vishal Patel

Patent Examiner

Tech. Center 3600